to carry on specific activities. During the years that followed, bureaus were established as follows:

Bureau of Tuberculosis	1915
Bureau of Sanitary Engineering	1915
Bureau of Venereal Diseases	1917
Bureau of Child Hygiene	1919
Division of Dental Hygiene	1920

The Bureau of Venereal Diseases terminated its activities in 1920 when funds for its continuance were no longer available. It was reëstablished in 1937. The Division of Dental Hygiene discontinued its activities in 1921 for the same reason.

During the period 1905 to 1927 activities in epidemiology and the control of communicable diseases were undertaken as an administrative function and partly as a laboratory function. Sanitary inspection was started in 1913, this work also being carried on as an administrative function. None of these activities took individual form until the state government was reorganized in 1927.

The State Constitution, Article XX, Section 14, states that the Legislature shall, by law, provide for the maintenance and efficiency of a State Board of Health.

CLINICAL NOTES AND CASE REPORTS

GRASS DERMATITIS*

By SAUL S. ROBINSON, M.D.
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IN 1926, Oppenheim of Vienna [1] first described forty cases of an unusual eruption appearing after bathing in the Ottakring baths in that city. The lesions were located upon the exposed parts of the trunk and the extremities, and were at first believed to have been caused by Sarcoptes bites. Further investigations, however, revealed that the patients had been lying in the meadow grass adjacent to the baths, exposed to the sunlight. Erythematous, linear, vesiculo-bullous lesions of crisscross and parallel-line configurations appeared twenty-four to forty-eight hours later over the skin areas touched by the grass. The eruption healed spontaneously in about one week, but at its sites were left dark brown macular stripes strongly resembling artefacts. These deeply hyperpigmented areas persisted for several months before gradually disappearing. Oppenheim named the condition "dermatitis bullosa striata pratensis." Cases have since been reported from various parts of Europe, including France,[2] Yugoslavia,[3] Italy,[4] and England.[5] Corson [6] reported one American case in October, 1935. The paucity of case reports in the United States is possibly due to the failure to recognize the disorder when seen. It is the purpose of this report to bring the characteristics of grass dermatitis to the attention of physicians in California and the West.

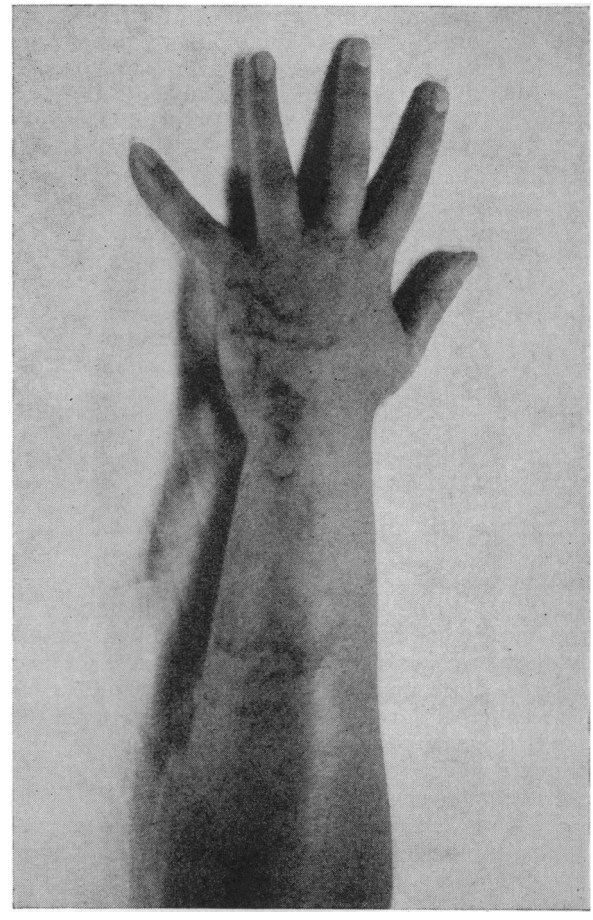

Fig. 1.—Grass dermatitis pigmentation showing the peculiar crisscross and linear lesions over the hand and forearm. One month duration.

REPORT OF CASE

Miss K. H., age 15, was admitted to the outpatient dermatology clinic with the complaint that "brownish lines" had appeared during the past month over her hands and forearms. The patient had mowed a lawn five weeks previous while exposed to a strong sunlight. During this procedure the cut grass had flown up out of the mower and had lightly touched her hands and forearms. On the next day an itching, bright red, striped, bullous eruption appeared over the back of her hands and the outer surface of her forearms. The disorder subsided spontaneously in about one week, leaving brownish discolorations at its sites. These hyperpigmented areas darkened considerably during the month previous to the consultation. No subjective symptoms were associated with the pigmentary lesions.

The dermatologic examination revealed the patient's exposed skin to be markedly hyperpigmented by exposure to the sunlight. A peculiar pigmented mottling was located upon the dorsum of the hands and the extensor surface of the forearms. The lesions consisted of dark brown macular crisscross and parallel linear configurations. The appearance of the eruption strongly resembled artefacts due to the actual contact of the grass blades with the cutaneous surface. No biopsy was permitted, and the patient failed to bring specimens of the grass for testing.

* Read before the Dermatology and Syphilology Section of the California Medical Association at the sixty-sixth annual session, Del Monte, May 2–6, 1937.

From the Department of Dermatology, Cedars of Lebanon Hospital.

1 Oppenheim, M.: Ottakringer Badebeiss, Wien. dermat. Gesellsch. (Oct. 20), 1926.

2 Lanzenberg, M. P.: Bull. Soc. franc. de dermat. et syph., 39:1524, 1932.

3 Philadelphy, A.: Wien. Klin. Wchnschr., 41:88, 1928.

4 La Cava, G.: Policlinico (Sez. prat.), 40:891, 1933.

5 Corsi, H.: Brit. J. Dermat., 45:542, 1933.

6 Corson, E. F.: Meadow Grass Dermatitis, Arch. of Derm. and Syph., 32:616, 1935.

COMMENT

The etiologic agents in grass dermatitis (dermatitis bullosa striata pratensis) are the actual contact of the skin and the grass in a susceptible subject with the exposure to the sunlight of the involved areas. Although many grasses have been tested, the type of grass or herb responsible for the eruption has not been determined.[7,8] The European cases have occurred in most instances after taking sunbaths in meadows or on river banks. Many sufferers of the disorder, as was the case with my patient, did not go into the water. Negative results were obtained on testing salicylic acid compounds in leaves, and trauma caused by the cutting edges of the grass.[4,7,8]

M. Kitchevatz [8] believes that the chlorophyll in the grass and red rays of light are the causative agents in meadow-grass dermatitis. This investigator applied chlorophyll solution for one hour to slightly scratched skin in normal individuals and then exposed the areas to the red rays of light. In a few of the patients so tested, inflammation and subsequent brown pigmentation occurred that simulated the peculiar appearance of grass dermatitis. Exposure to the ultraviolet rays did not produce the erythema or the subsequent pigmentation. The explanation of the action of chlorophyll lies in its ability to render plants responsive to the red rays, the most active rays, of the solar spectrum. Oppenheim [1] noted that the areas of skin hyperpigmented by sunlight are especially affected. My patient presented a marked general pigmentation of the skin of the affected parts. Kitchevatz [8] reported a case with vitiligo where the depigmented regions were not affected while the hyperpigmented areas were involved.

Diagnosis.—In the diagnosis of dermatitis bullosa striata pratensis, the important factors to note are the bizarre, striated and crisscross, early, erythematous, vesiculobullous lesions on the exposed parts of the body, simulating artefacts that later become hyperpigmented on healing. This hyperpigmentation tends to persist for several months before slowly disappearing. A history of actual contact with grass or herbs prior to the outbreak confirms the diagnosis.

Treatment.—The therapy of grass dermatitis in the inflammatory stage is similar to that of dermatitis venenata. The application locally of a soothing preparation, such as calamin lotion, N. F., is beneficial. No therapy has been found to date to prevent the secondary pigmentary changes or to cause their disappearance more rapidly when formed. The marked progressive pigmentary changes in the lesions could possibly be prevented by the early protection of the areas from further exposure to light. It would be well to caution patients with the disorder to avoid future contact with grass or plants.

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[7] Siemens, H. W.: Dermat. Wchnschr., 85:1577 (Nov. 12), 1927.

[8] Kitchevatz, M.: Ann. de Derm. et de Syph., 5:293, 1934.

RUPTURED INFRAPATELLAR LIGAMENT*

REPORT OF TWO CASES

By LEWIS COZEN, M.D.
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THE infrapatellar ligament (ligamentum patellae) extends from the patella above to the tuberosity of the tibia below. Ruptures of this ligament are not common. Wagner, in 1927, could find only one case reported prior to his observation. Although Gallie, during the same year, recalled having seen five patients with ruptured infrapatellar ligaments, he described none of his cases. McMaster, in 1933, refused to accept Gallie's cases as authentic. Haldeman and Soto-Hall listed five cases of ruptured patellar tendon, with no accompanying description. Conwell and Allredge, in 1937, reported an additional case of this nature.

At the San Francisco Hospital during a period of eight years, from 1928 to 1936, one case of ruptured ligamentum patellae was observed. In July, 1936, a second ruptured infrapatellar ligament was repaired. During this same period of eight years, more than 115 fractures of the patella were treated at the hospital.

A brief description of the two cases follows.

REPORT OF CASES

CASE 1.—J. T., aged 68, tripped on a street corner while intoxicated. He fell on his left knee, experienced severe pain in the region of the left patella, and was unable to arise. On examination five hours after injury, a diffuse hemorrhagic discoloration, covering the inferior border of the patella and the infrapatellar ligament, was noted. A definite transverse groove, 1.5 centimeters wide, could be palpated in the center of the ligamentum patellae. No active knee extension was possible. X-rays showed a definite transverse shadow, corresponding to the groove of a ruptured infrapatellar ligament. The patella seemed to be slightly higher on the femur than normal.

Treatment consisted of skin traction immobilization for ten days, followed by suture of the torn ligament by Dr. R. Dresel and the author. The illustration demonstrates the incision used. The ligament was found to be completely ruptured in its mid-third. A gap of one centimeter was filled with fibrinous exudate and fibrous tissue. No tear of the knee-joint capsule was noted.

After trimming the irregular edges of the torn ligament, the tear was repaired by three mattress sutures of No. 2 chromic catgut. Following closure of the operative wound, the knee was immobilized in plaster for two weeks.

CASE 2.—T. M. On February 19, 1932, this patient stumbled, fell down several stairs. He was unable to extend his knee actively; he could bear no weight on the left leg. The patella appeared slightly higher (cephalad) as compared with the opposite knee. A hiatus could be palpated over the infrapatellar ligament, and x-rays confirmed the clinical findings. Dr. K. Haldeman employed a paramedian incision to repair the defect in the ligament. The ligament was found to be ruptured off the anterior and inferior surface of the patella. The torn ligament was approximated with chromic catgut mattress sutures. A leg cast was applied. The patient was discharged two weeks after surgery. Subsequent course not obtainable.

COMMENT

The diagnosis of a ruptured infrapatellar ligament is not difficult if one bears it in mind as a possibility in injured knees. The loss of active knee extension and the presence of a palpable transverse groove just distal to the patella make the

* From the service of Drs. L. Abbott and F. Bost.